

# DEVELOPMENT REVIEW BOARD REPORT



MEETING DATE: June 15, 2006

ITEM NO. \_\_\_\_\_

CASE NUMBER/ PROJECT NAME	<b>28-DR-2006</b> <b>Mescal Park Equestrian Arena Lighting</b>		
LOCATION	11015 N. 68 <sup>th</sup> Place		
REQUEST	Request approval for shielded, controlled lighting to the equestrian arena.		
OWNER	City of Scottsdale 480-312-4138	ENGINEER	DH Lighting Solutions 602-867-4263
ARCHITECT/ DESIGNER		APPLICANT/ COORDINATOR	Judy Weiss The City of Scottsdale 480-312-2416
BACKGROUND	<p><b>Zoning.</b></p> <p>The site is zoned Open Space (O-S) District. This zoning district allows for Municipal Uses such as parks and recreational facilities subject to a Municipal Use Master Site Plan approval. The original Mescal Park Master Plan was approved in 1986 (Case 48-UP-86), and was recently amended to allow the equestrian arena to be lighted for extended park hours in February 2006 (Case 48-UP-86#2).</p> <p><b>Context.</b></p> <p>The site is located at the northeast corner of 68<sup>th</sup> Place and Mescal Street.</p> <p>Adjacent Uses and Zoning:</p> <ul style="list-style-type: none"><li>• North Single Family Residential (R1-35), which is the North Scottsdale Estates Unit 2 residential subdivision.</li><li>• South Commercial Office (C-O) and Multi-Family Residential (R-5 PCD) districts which contains the Agua Calienta apartments.</li><li>• East Multi-Family Residential (R-5 PCD) district which contains the Scottsdale Pueblo Norte development.</li><li>• West Single Family Residential (R1-35), which is the North Scottsdale Estates residential subdivision.</li></ul> <p><b>Applicant's Request.</b></p> <p>The request is for the lighting of the existing 25,000 square foot equestrian riding arena. The park site currently contains a turf-lined retention basin, unlit riding arena, pedestrian trail, bridle path and small off-street unpaved parking area. Lighting poles and fixtures are designed after much community input to be suitable for this location. No other park modifications are being requested with this application.</p>		
APPLICANT'S PROPOSAL			

**Development Information.**

- *Existing Use:* City Neighborhood Park with equestrian arena
- *Proposed Use:* City Park with lighted neighborhood equestrian arena
- *Buildings/Description:* No buildings, existing or proposed
- *Parcel Size:* 10+/- acres, existing arena is approximately 125 feet wide and 200 feet long in area (25,000 square feet)
- *Building Height Allowed:* 24 feet
- *Existing Building Height:* No buildings
- *Lighting:* 6 poles, height measured at 31 feet to the bottom of the light fixture

## DISCUSSION

The equestrian riding arena is proposed to be lighted with six new 31-foot tall poles with mounted shoebox fixtures, fully shielded and directed downward. The shoebox fixtures are typically found in parking lots, but generally are limited to 20 feet in height for parking areas. The arena lighting is proposed to contain light fixtures with high-containment features including extended shielding to reduce glare and visibility of the light source from surrounding properties 100 feet from the arena. Arena lighting is controlled by an “on demand” switch, which operates on automatic timers and will turn off no later than 10:00 PM.

Poles, fixtures and shields will be painted flat gray with a powder-coated finish, as agreed to by the neighborhood. Additional landscaping along the west side of the equestrian arena will be provided to reduce the impact of arena lighting on neighbors. The extent of landscaping will be determined after the lights are installed to appropriately balance the necessary screening with the desire to maintain existing views.

**Community Involvement.**

Over the past year there have been multiple public meetings regarding this proposal, and there have been both support for and opposition to the arena lighting. The most recent neighborhood meeting was held on April 11, 2006, to discuss the lighting plan and details.

## OTHER BOARDS AND COMMISSIONS

In February 2006, the City Council unanimously voted to approve the addition of lighting for the riding arena.

In June 2005, the Parks & Recreation Commission unanimously voted to support the addition of lighting for the riding arena.

STAFF  
RECOMMENDATION

Staff recommends approval, subject to the attached stipulations.

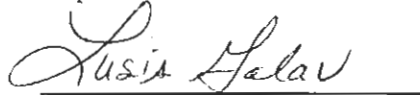
**STAFF CONTACT(S)**

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E-mail: tcurtis@ScottsdaleAZ.gov

**APPROVED BY**



Tim Curtis, AICP  
Report Author



Lusia Galav, AICP  
Director, Current Planning  
Phone: 480-312-2506  
E-mail: lgalav@scottsdaleAZ.gov

**ATTACHMENTS**

1. Applicant's Narrative
2. Context Aerial
- 2A. Aerial Close-Up
3. Zoning Map
4. Site Plan
5. Lighting Plans
6. April 11, 2006 neighborhood meeting notes
7. Mescal Park Amended Master Site Plan Stipulations
- A. Stipulations/Zoning Ordinance Requirements



# Project Narrative

This document will be uploaded to a Case Fact Sheet on the City's web site.

Date: 2/2/06

Project No.: 469-PA-05

Coordinator: aw

Case No.:        -        -       

Project Name: MESCAL PARK EQUESTRIAN ARENA LIGHTING.

Project Location: 11015 N. 68th PLACE

## Property Details:

☒ CITY PARK SITE  
☒ Single-Family Residential ☐ Multi-Family Residential ☐ Commercial ☐ Industrial

Current Zoning: O-S Proposed Zoning: SAME

Number of Buildings: EXISTING RIDING ARENA Parcel Size: 10 +/-

Gross Floor Area/Total Units:        Floor Area Ratio/Density:       

Parking Required: EXISTING 6 SPACES Parking Provided: 6 SPACES

Setbacks: N -        S -        E -        W -       

## Description of Request:

Provide new 35'-tall shielded lighting to existing equestrian riding arena. Case 48-UP-86<sup>#2</sup> has provided master Site Plan approval to add lighting in 2/06. In addition to site lighting, new landscaping will be added around arena to mitigate impact of new lighting. Specialized shielding for "shoe box" lighting fixtures will be provided minimize light spillage from beyond the edge of the site. Neighborhood involvement is ongoing and further input will be obtained by OpenHouse.

Planning and Development Services Department

7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 • Phone: 480-312-7000

Attachment 1

312-7088





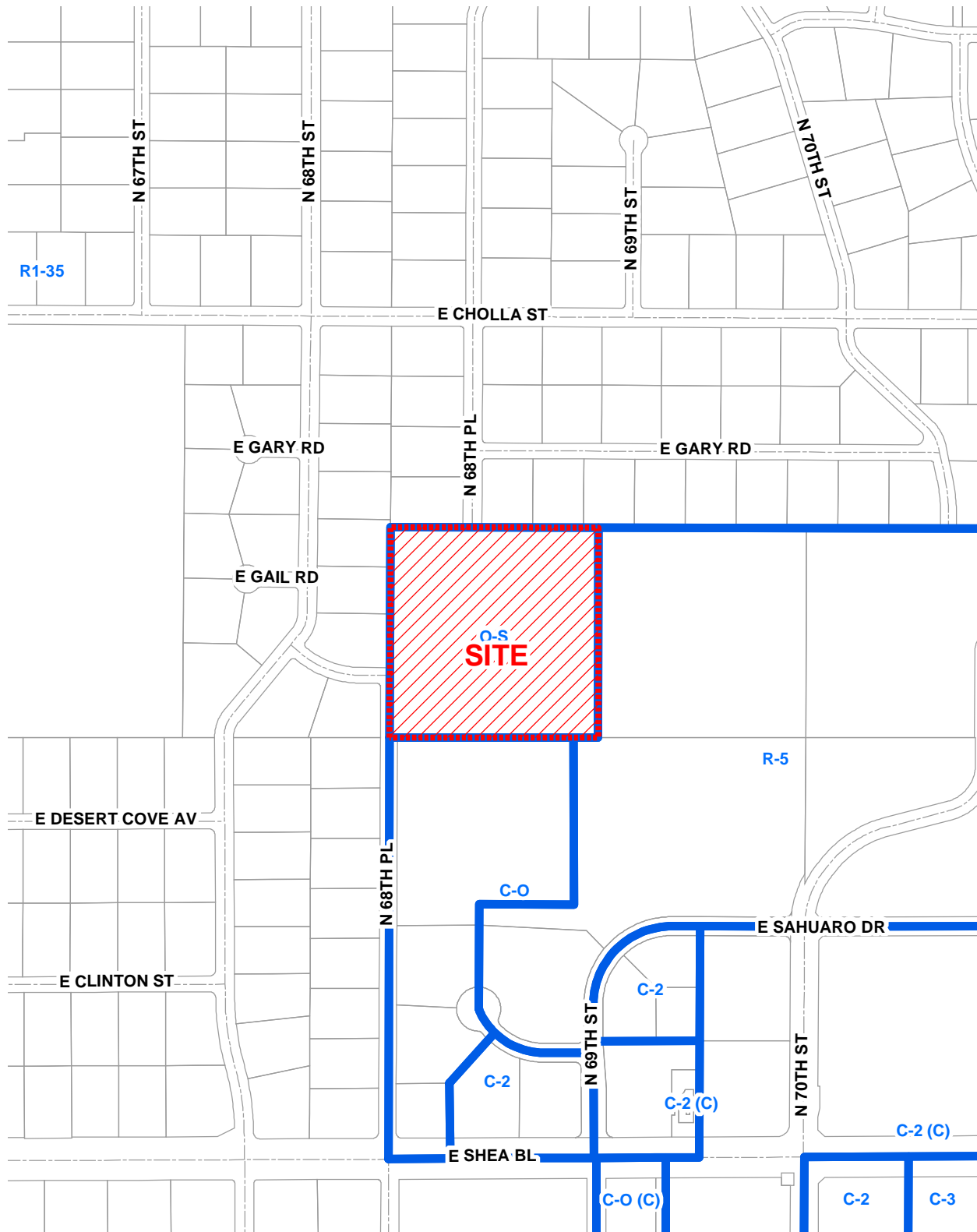




# Mescal Park Equestrian Arena Lighting

**28-DR-2006**

ATTACHMENT #2A



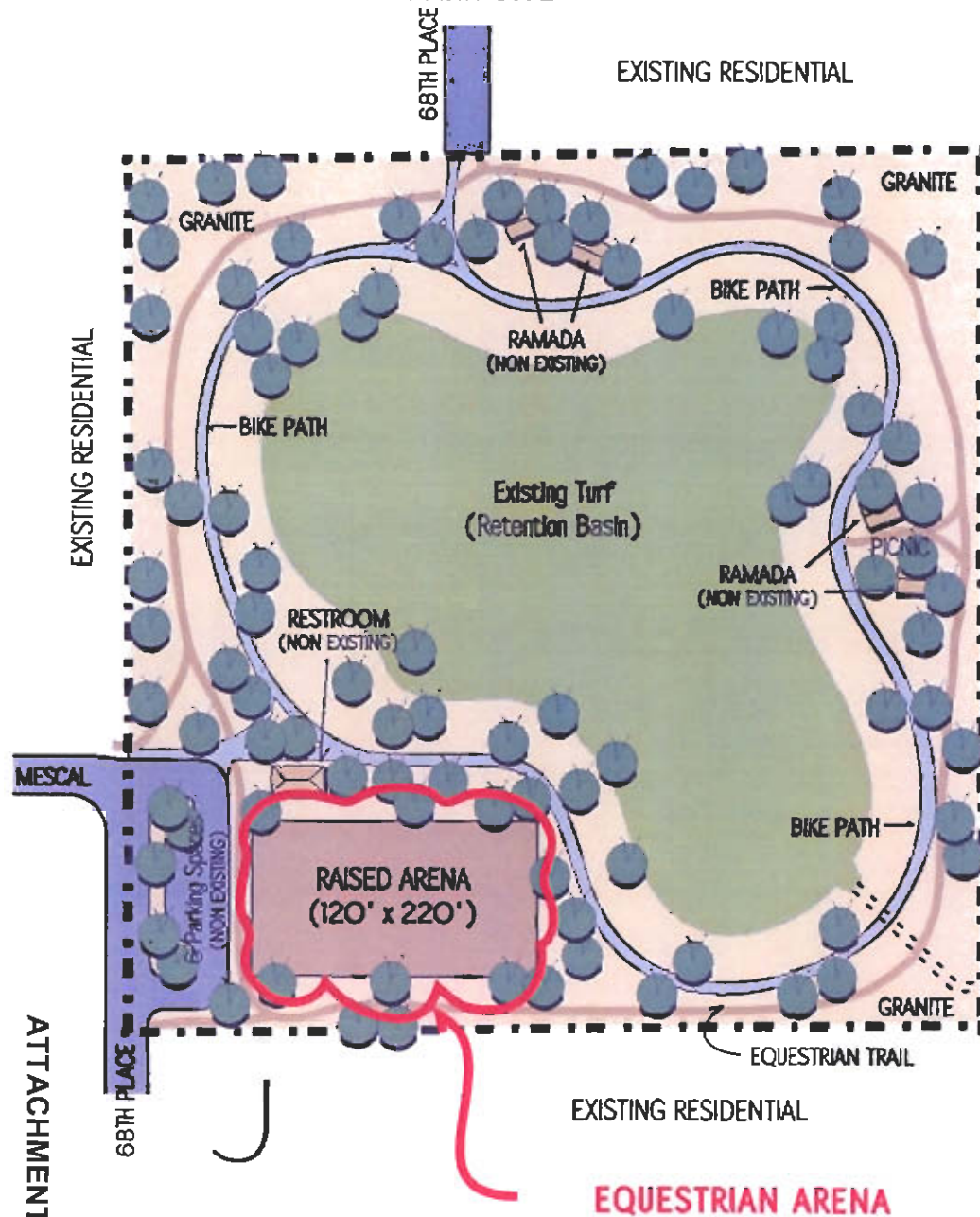
28-DR-2006

ATTACHMENT #3

I



# 10 ACRE NEIGHBORHOOD PARK SITE



\* PROPOSAL  
TO PROVIDE  
LIGHTING TO  
EQUESTRIAN  
ARENA AT  
SOUTHWEST  
CORNER OF  
SITE \*

## MESCAL PARK MASTER PLAN

APPROVED BY  
CITY OF SCOTTSDALE  
PARKS & RECREATION COMMISSION

6-15-85

REV. 6-17-86 RJM  
11-16-81 NR

28-DR-2006

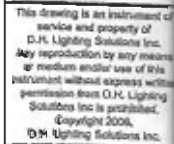
3/3/2006

SITE PLAN

CITY OF SCOTTSDALE  
COMMUNITY SERVICES - PARKS & RECREATION



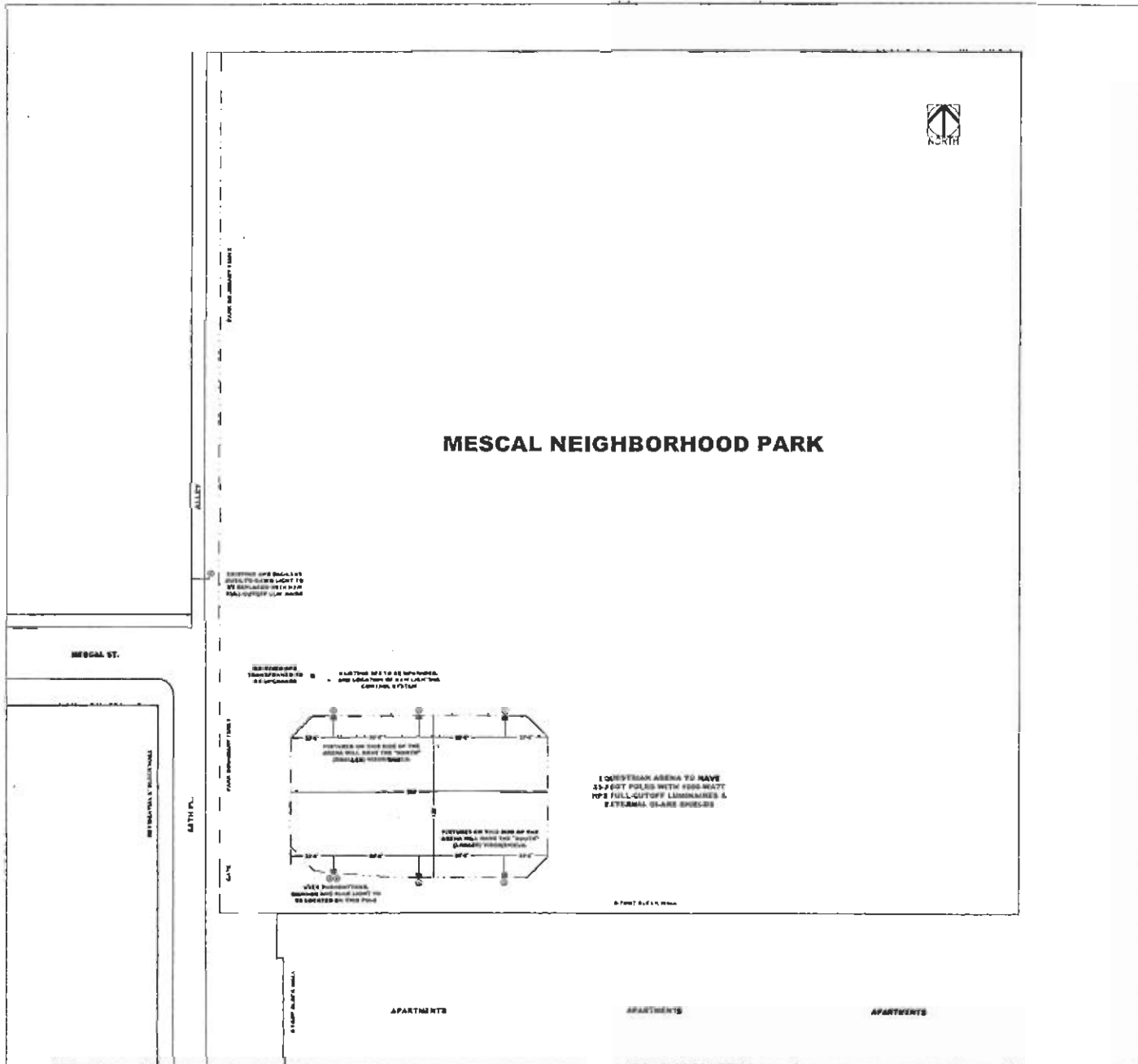




**MESCAL EQUESTRIAN ARENA**  
Arena Lighting Installation  
Scottsdale, AZ

Scale : 1" = 40'

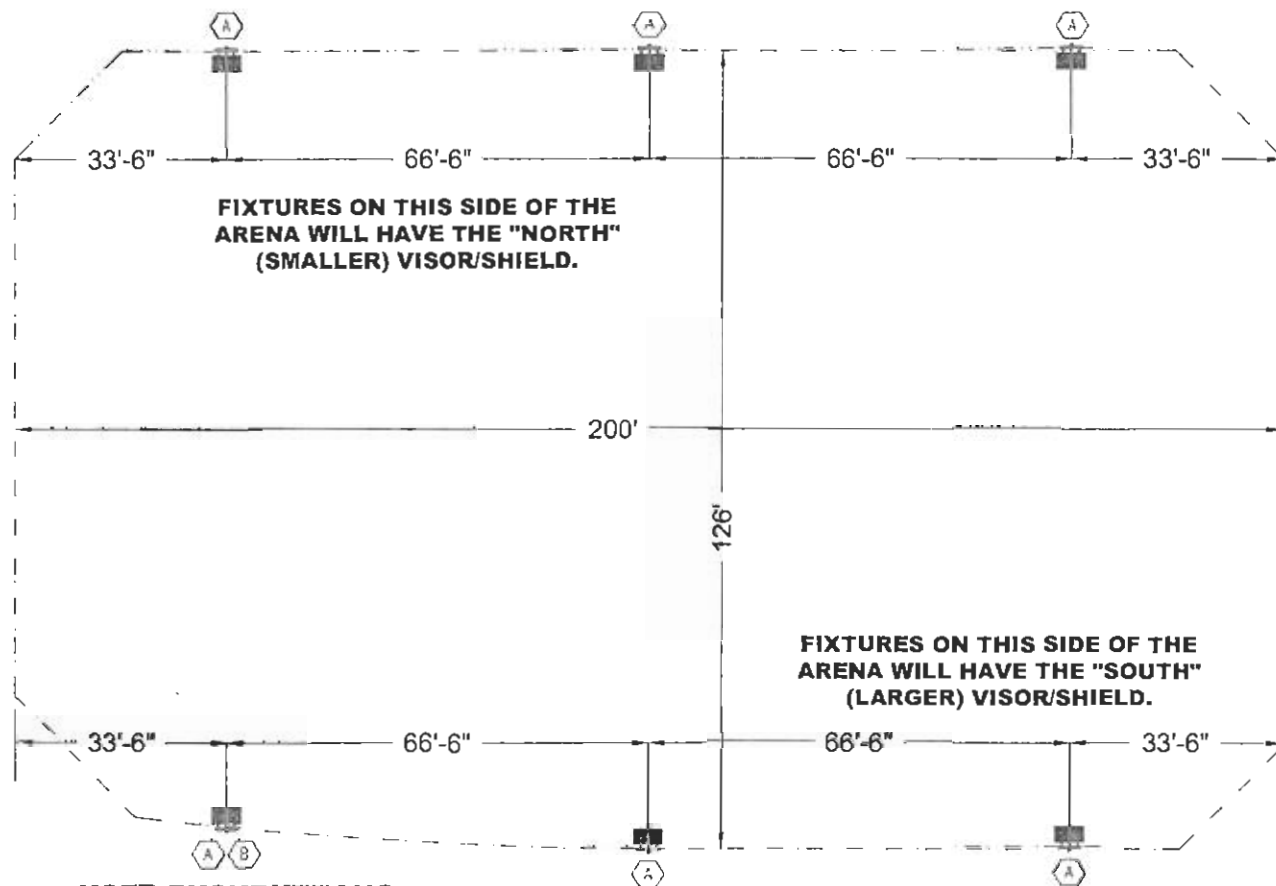
Chen, N.



## LIGHTING PLANS

28-DR-2006  
4/01/2006

**ATTACHMENT #5**



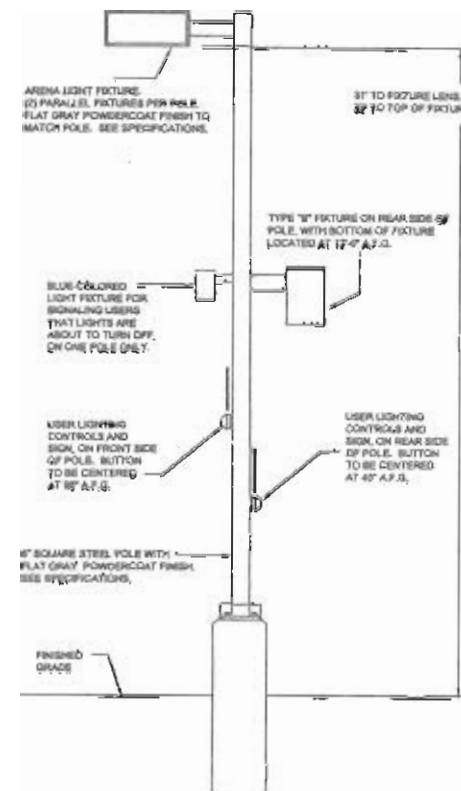
**USER PUSHBUTTONS, SIGNAGE AND BLUE LIGHT TO BE LOCATED ON THIS POLE**

## NEW LIGHTING LAYOUT

### LIGHTING OPERATING HOURS

**LIGHTING TO BE CONTROLLED BY PCI CONTROL SYSTEM, WHICH WILL BE PROGRAMMED BY CITY STAFF AFTER INSTALLATION.**

## LIGHT POLE



## FIXTURE SCHEDULE

Type	Description	Manufacturer	Catalog #	Operating Schedule
A	DOUBLE 1000-WATT HPS FULL-CUTOFF FIXTURES, WITH MANUFACTURER PROVIDED EXTERNAL SHIELDING, ON 12-FOOT SQUARE STEEL POLE. ALL FINISHES ARE A FLAT GRAY.	ALLSCAPE OR	ALDI-CUSTOM DOUBLE BRACKET, 2-VOLTAGE-TO-CUSTOM EXTERNAL SHIELD OR 1000-WATT 1/2" LAMP	CONTROLLED BY USER PUSH-BUTTON FOR ONE-HOUR INTERVALS
B	FULL-CUTOFF CYLINDER WALL SCENE, ATTACHED TO SIDE OF POLE AT 12-FOOT A.F.G. FOR ILLUMINATING PUSH-BUTTON SIGNAGE. FLAT GRAY FINISH.	ALLSCAPE OR	BL227-D-75 HPS-VOLTAGE FL-D-F, 6Y POWDER COAT-100% DOWNLIGHT ONLY OR 75-WATT HPS LAMP	DUSK TO PARK CLOSING



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**MESCAL EQUESTRIAN ARENA**  
Arena Lighting Installation

Date : 4/1/20

Scale : 1" =

28-DR-2006  
4/01/2006



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# MESCAL EQUESTRIAN ARENA

## Arena Lighting Installation

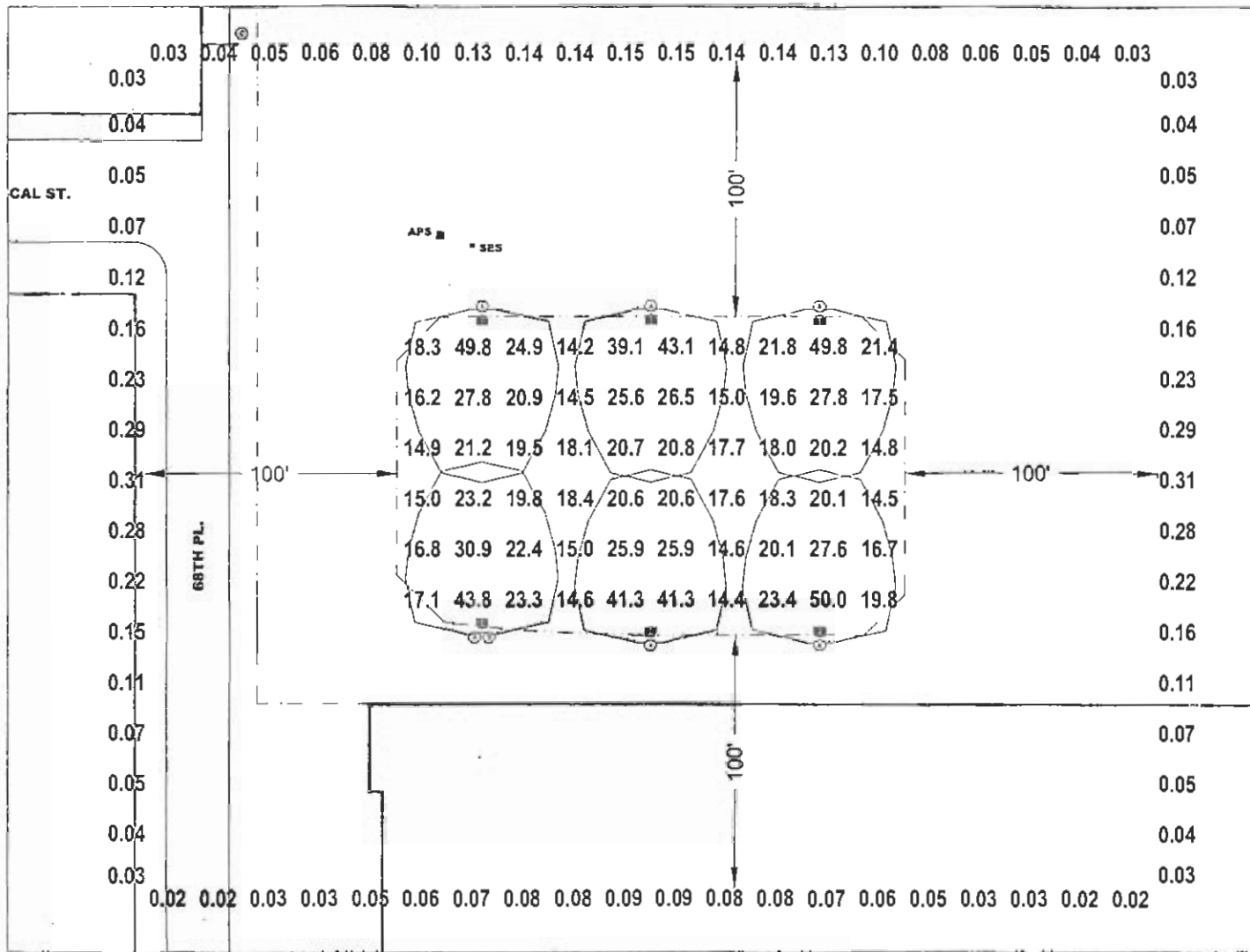
Scottsdale, AZ

Date : 4/1/2006

Scale : 1" = 20'

Sheet No.

## ON-SITE AND PERIMETER ILLUMINANCE CALCULATIONS



### PHOTOMETRIC CALCULATIONS

AREA NAMES	LUMENS	LLF	AVE	MAX	MIN	MAX/MIN	AVE/MIN
HORIZONTAL FC @ 3'	140,000	0.69 (INCL. 10% RED. FROM SHIELDING)	23.13	49.99	14.22	3.51	1.63
East VFC @ 6' A.F.G.	140,000	0.95	0.13	0.31	0.03	11.07	4.69
North VFC @ 6' A.F.G.	140,000	0.95	0.09	0.15	0.03	5.28	3.18
West VFC @ 6' A.F.G.	140,000	0.95	0.13	0.31	0.03	11.23	4.75

28-DR-2006

4/01/2006





**Neighborhood Meeting – Mescal Park Arena Lighting**  
**April 11, 2006**  
**6PM – Via Linda Senior Center**  
**NOTES**

Staff present: Judy Weiss, Parks and Recreation Director, Reed Pryor, Parks and Grounds Management Manager, Steve Lehmann, Senior Recreation Coordinator.

Judy made some general introductions and reported that the signs for the grass basin are installed and the pilot program has begun. Judy reminded the group that self-policing was a critical component in making the pilot program successful. She has already received complaints regarding reckless riding in the basin.

Don Happ, DH Lighting Solutions, and the project lighting consultant, presented a powerpoint presentation regarding light pole and shield design, height, color and spill and glare control. He showed examples of other shielded lighted facilities around Scottsdale. Don compared the fixtures at Mescal to be like “oversized parking lot lights”.

In response to a question, Don noted that the size of the shoebox would be either 24” x 30” or 30” x 36”. He noted that spill control can be achieved with these types of fixtures. Don also reiterated the stipulation of lights off at 9PM in the winter and 10PM in the summer. He covered the IES standards of 20-foot candles in an arena like Mescal and noted that uniformity is important since research has shown that horses will perceive shadows as solid objects. Uniformity is determined by pole height and this facility will have 6 poles at 31 feet to the bottom of the light fixture.

In response to a question, Don noted that the poles are designed close to the arena rail. The citizen requested a one-foot buffer in case a horse turns its head outside of the arena. Don said that the poles could be moved with no impact.

A task light will be included and be on all evening until 9 or 10PM.

The pole color was discussed. The consensus was that the priority was as much invisibility as possible during the day. This translates to a gray or galvanized metal color for the poles, fixtures and shields.

It was the consensus of the neighbors that the control buttons and task light would be best situated on the northwest pole. The light cycle was requested at 45 minutes.

The shielding that would be around the fixtures was discussed. The stipulation is for no view of the light source at 100 feet. Don showed a comparison of before and after shielding on a basketball court at Sonoran Hills Park in Scottsdale.

Don noted the shield measurements and covered the foot candle measurements in the arena and at the 100 foot perimeter. Don noted that the APS street light will be replaced

during this project with a more modern shield. The neighbors recommended some protective grating over the glass to prevent vandalism.

Reed Pryor, Parks and Grounds Manager, discussed some landscape options. Berming was also discussed. It was the consensus of the groups that they desired to have the lights up and running prior to any landscaping. The concern was to balance the mitigation of the lights and maintain mountain views.

One resident asked the cost of the project. The answer was \$60-70,000 for lights, approximately \$10,000 for landscaping.



**STIPULATIONS FOR CASE 48-UP-1986#2**  
**CHANGES MADE BY COUNCIL ARE SHOWN IN UPPER CASE, BOLD LETTERS**

PLANNING/ DEVELOPMENT

1. **CONFORMANCE TO DEVELOPMENT SUBMITTAL.** Development shall conform to the site plan submitted by Development Services Department and dated 9/15/2005. These stipulations take precedence over the above-referenced site plan. Any proposed significant change, as determined by the Zoning Administrator, shall be subject to subsequent public hearings before the Planning Commission and City Council.
2. **LIGHTING REQUIREMENTS.** Stipulations are for the addition of lighting to the existing riding arena on the site, which is subject to subsequent Development Review Board approval.
  - a. Fixture mounting height shall not exceed 35 feet, as measured from the arena surface to the fixture lens.
  - b. Fixtures shall be full-cut off and utilize High Pressure Sodium (HPS) light sources only.
  - c. Fixture wattage shall not exceed 1000-watts.
  - d. The average maintained horizontal luminance level, as measured at 36 inches above the arena surface, shall not exceed 25.0 footcandles. A detailed photometric plan, to the satisfaction of Planning and Development Services staff, shall be included with Final Plans submittal.
  - e. All fixtures shall possess external glare shielding/skirting that prevents direct view of the light sources from any point 5-feet above grade at-and-beyond a 100-foot boundary around the arena. Details for this glare shielding/skirting, and a line-of-site Detail, shall be included with Final Plans submittal.
  - f. The interior of the glare shielding/skirting shall be finished as a flat black, while the exterior shall be finished to match the fixture.
  - g. If polycarbonate protective shielding is to be utilized, it shall be flat and parallel to the fixture lens. The external glare shielding/skirting shall then be lengthened in order to provide the same degree of glare control as if the polycarbonate was not being used.
  - h. The fixtures and poles shall be finished in a dark color, such as black or dark bronze, subject to DRB approval.
  - i. The pole bases shall have a brushed finish, and be colored to match the adjoining landscape, to the satisfaction of Planning and Development Services staff.
  - j. The lighting control system shall include a user pushbutton so that the lighting only operates when the arena is actually in use, and a timer that prevents use of the lighting after **9:00 PM DURING WINTER MONTHS AND 10:00 PM DURING SUMMER MONTHS, IN ACCORDANCE WITH STIPULATION NUMBER 6 BELOW.**
  - k. The City shall work with the utility company to replace the sag lens of the existing streetlight at the corner of mescal street and 68<sup>th</sup> place with a new flat lens fixture with rear house-side shield in order to reduce light spillage into adjoining lots.
3. **PEDESTRIAN AND EQUESTRIAN ACCESS.** With the Development Review Board submittal, the applicant shall submit a plan providing pedestrian and equestrian access to the arena from

the park and parking lot.

4. **STIPULATIONS OF PREVIOUS CASE.** Except as modified herein, stipulations for Case 48-UP-1986 shall continue to apply.
5. **LANDSCAPING ADJACENT TO THE ARENA AND 68<sup>TH</sup> PLACE.** Community Services department staff shall provide additional landscaping along the west side of the equestrian arena to reduce the impact of arena lighting on neighbors located west of 68<sup>th</sup> place.
6. **HOURS OF OPERATION OF ARENA LIGHTING. HOURS OF OPERATION OF ARENA LIGHTING SHALL BE NO LATER THAN 9:00 PM DURING WINTER MONTHS BEING OCTOBER THROUGH MARCH AND 10:00 PM DURING SUMMER MONTHS BEING APRIL THROUGH SEPTEMBER. ALL ARENA LIGHTING SHALL BE TURNED OFF NO LATER THAN THOSE DESIGNATED HOURS.**

**Stipulations for Case:  
Mescal Park Equestrian Arena Lighting  
28-DR-2006**

Unless otherwise stated, the applicant agrees to complete all requirements prior to final plan approval, to the satisfaction of Project Coordinator and the Final Plans staff.

**PLANNING**

**APPLICABLE DOCUMENTS AND PLANS:**

**DRB Stipulations**

1. Except as required by the City Code of Ordinances, Zoning Regulations, Subdivision Regulations, and the other stipulations herein, the site design and construction shall substantially conform to the following documents:
  - a. Lighting installation shall be installed and operated to be consistent with the Lighting plans submitted by D.H. Lighting Solutions Inc. with a plan date of 4/1/2006.

**EXTERIOR LIGHTING DESIGN:**

**DRB Stipulations**

2. Final plans shall comply with all lighting stipulations approved under case 48-DR-86#2 and 48-DR-86.

**RELEVANT CASES:**

**Ordinance**

- A. At the time of review, the applicable Use Permit case(s) for the subject site were: 48-UP-86#2 and 48-UP-86.